

# American



# Farmer,

AND SPIRIT OF THE AGRICULTURAL JOURNALS OF THE DAY

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## THE AMERICAN FARMER.

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### SAINFOIN.

With the view of bringing this grass to the notice of agriculturists, we propose to make some remarks upon its culture, and before we proceed farther we deem it but proper to state, that all we have to say will be based upon European authorities, as we have had no experience of our own to guide us in the premises. But in the absence of personal knowledge we will premise, that, from all we have read upon the subject, we are very strongly inclined to the opinion, that there is, perhaps, no other in the whole catalogue of artificial grasses so eminently adapted to poor ground, or one which with less outlay, could be made to conduce to the profits and comforts of a farm. Its value in this aspect, has struck us so forcibly that we have felt it our duty to bring the propriety of its culture before our readers. In so doing we are sure our motive will be appreciated, although the advice we may give should not be availed of.

When we have looked through many of the old states and beheld the countless worn out old fields which are lying waste, and utterly profitless to their proprietors, the thought has arisen in our mind, that if it were possible to convert them at small expense into pastures or meadows, that the sum of wealth and human comfort which would enure to the country, would be almost incalculable; and after looking through the whole range of those grasses, generally termed artificial, in search of the one best suited to the object named, we have arrived at the conclusion, that, of all others, *sainfoin* is the one that may be made to answer the end in view. In making this remark, it is not our purpose to inculcate the idea that old fields which, from the exhausting influence of injudicious and long continued cropping, had become deprived of every vestige of vitality, could by simply being sown in *sainfoin*, be restored at once to fertility, or covered, without farther trouble, with a luxuriant growth of grass. Such is neither our belief nor desire. But we do wish to convey the idea that, with a comparatively trifling expense, such lands may not only be restored to cultivation, but be rendered profitable. We believe that there are but few of such fields but might be thus restored, and made to yield tolerable crops of *sainfoin*, by having a good crop of buckwheat turned under, and from 25 to 50 bushels of lime, or twenty loads of marl to the acre, spread thereon. The buckwheat might be made to grow on the poorest of them by sowing a bushel of plaster to the acre. Where it might be the pride of the party—as it ought to be with all landowners—to make his crop of *sainfoin* a good one, it would be best to turn in two successive crops of buckwheat, which could be done in the same season. If two crops even should be turned in, no

one will say, that this would be expensive manuring, when it is recollected that a field set in *sainfoin* will last from ten to fifteen years, and afford for the first named period remunerating crops of hay, with aftermath yielding choice pasture to the stock from mid-summer to mid-fall. We should be disposed to think, that independently of the acreable product of good hay, which would average, after the first and second year, from one and a half to two and a half tons, the pasture during the period named would more than compensate for the cost and trouble expended in the preparation of the field.

Having made these general remarks we will now endeavour to convey to our readers, our opinions and views of a few of the European authorities on the subject.

The editor of the *Farmer's* holds this language:

"This is the grass proper for *poor soils* which will grow no other, nor does it matter of what kind, or how shallow, provided they are *dry*. It will grow out of the solid rock. Limestone, and chalky earth, are its favorites, hence it is successful upon chalked lands."

"*Sainfoin* will grow good crops from ten to fifteen years, and will then afford a sheep pasture for several years afterwards; but it must be wrong to suffer it to occupy the soil any longer than it is productive. It is usually shut up in the spring, and mowed for hay, and then shut up for late after-feed; but sheep should not be suffered to remain upon it after the frost is set in, lest by being too close they damage the root. This grass should be mowed early, before it is fully blown, not only that being constantly mown, it may not be too much exhausted, but that the hay may not be too stalky and sapless."

"On the most proper soils, *sainfoin* will sometimes produce a full crop the first year, but generally, that does not happen until the third, or fourth, the first and second being only a load per acre, or half a crop: on this account in some parts of Kent, they sow clover mixed with it, with the judicious view of obtaining a weightier growth of clover at first than they could expect of *sainfoin*, which last gets the upper hand in its turn, as the former fails. It is usually broadcast upon any corn [wheat, rye or oats] crop, or by itself in the spring, or even in the autumn."

"Quantity of seed per acre from 4 to 8 bushels the acre with or without 6 or 8 of clover. It ought to be remembered that *sainfoin* hay soon dries and requires only one turning of the swathes. The right preparation for this valuable grass, is a perfectly clean and fine garden tilth."

In another article on the same subject the author says: "It is, perhaps, not too much to say generally that *sainfoin* may be successfully cultivated upon all dry soils. I have seen it very flourishing and attended with constant profit, upon a clayey surface, the subsoil being calcareous, through which the tap-roots of the plant draw nourishment from an immense depth."

"The seed being good, scarcely any of it will miss, but it has been sometimes sowed in so bad a state, that, perhaps, not more than one seed in ten, retains the power of vegetation. The signs of perfection are, brightness of colour in the husk, the kernel plump, and of light grey blue, or shining black color. If you are suspicious, divide the kernel across the middle, and should the inside prove of a greenish, fresh color, the seed may be depended upon; but if a yellowish color, and friable about the navel, and thin or shrivelled, the contrary."

"In the early period of the culture of this grass in England, improvements of vast consequence were made by it; an estate in Oxfordshire of one hundred and forty pounds per annum, sown with *sainfoin*, was sold for £1,

400, and held its value: a farm of £10 a year, ruinous to the tenant, whilst arable, being planted with this grass was let by the owner at £110 a year and proved a good bargain. These farms were of thin, stony land, at only one and two shillings per acre; and yet the *sainfoin* they produced would fatten oxen. The long tap-roots of this plant, where they have power to penetrate, will provide themselves a pasture, independent of the upper stratum of the soil."

"But whoever desires to witness the perfection of the *sainfoin* culture must repair to Holkam, the residence of Mr. Coke."

Mr. Young, another British authority, "considers it one of the most valuable plants that were ever introduced into the Agriculture of Great Britain."

Sir John Sinclair observes, "that the improvement made by *sainfoin*, is very great. *Poor soils*, not worth more than from 2s. 6d. to 5s. per acre for any other purpose, will under this crop, yield from 1½ to 2½ tons of valuable hay, worth a guinea per ton more than meadow hay equally well cured, besides a considerable quantity of after grass. It also lasts in the ground equally productive for a number of years."

"The general idea is that it will only succeed in chalky soils, or on lands resting on limestone; but it would thrive on other soils manured with calcareous matter. The land ought to be in good order, and thoroughly cleared of weeds before the seed is sown; accompanied by barley or buckwheat, after two or three green crops of tares, turnips or cabbages. An early seed time ought to be preferred, as the end of February or beginning of March."

We could multiply British authorities in favor of the advantages resulting from the culture of *sainfoin*, but as we think we have already adduced enough to satisfy the reader, we shall conclude by the observation, that, in our opinion, the owners of poor old fields could not put them to a better purpose than to treat them in the way we have suggested in our introductory remarks to this article, and by setting them down in *sainfoin*.

### ARTIFICIAL MANURES.

The following extract from Professor Dana's *Muck Manual* will be found to possess both interest and instruction to the practical as well as scientific farmer.

"The class of salts as manure, is to be distinguished from the salts, called mineral manures, by this circumstance, that they contain large portions of peculiar animal products, called urea, and uric acid. These afford ammonia, in large quantity, by their decomposition. Having considered the relative value of the two classes of manure, those composed of salts, and of salts and geine, that consisting chiefly of geine, is not to be explained."

First and foremost in this class, is swamp muck, mud, or peat. This class includes also, dry leaves, dry vegetables of all sorts; ploughing in of green or dry crops, irrigation. These are fruitful topics. The principles only of their action, can be pointed out. The application of the principle, must be left to the farmer. The why, of things has been shown; the how must be deduced from the why, by practical men.

It is well known that all peat shrinks by drying, and when perfectly dried, at 300° F. loses from 73 to 79 per cent. of water. When allowed to drain as dry as it will, it still contains, about 2-3 of its weight of water. It shrinks from 2-3 to 3-4 of its bulk. A cord wet becomes 1-4 to 1-3 of a cord when dry. To compare its value



with cow dung, equal bulks must be taken, and hence, to dry peat, a bulk of water must be supposed to be added, in proportion above stated, or still better, because easier done, the pile of dry peat is to be estimated by the pit left after digging. It will be found on the above data, that 100 parts of fresh dug peat of average quality contain—

Water,	85.
Salts of lime,	.50
Silicates,	.50
Geine,	14.

100

This does not differ much from fresh cow dung, so far as salts, geine, and water are concerned. The salts of lime, are actually about the same, while the alumina, oxide of iron, magnesia, in the silicates added to the salts of lime, make the total amount of salts in round numbers, equal that of cow dung.

Peat is too well known, to render it necessary to say, that it is the result of that spontaneous change in vegetable matter, which ends in geine. Peat is, among manures consisting chiefly of geine, what bone dust is, among manures, consisting of animal matter. Peat is highly concentrated vegetable food. When the state in which this food exists, is examined, it is found not only partly cooked, but seasoned.

The salts and geine of a cord of peat are equal to the manure of a cow for three months. It is certainly a very curious coincidence of results, that nature herself, should have prepared a substance, whose agricultural value approaches so near cow dung, the type of manures. This subject may have now been sufficiently explained. Departing from cow dung and wandering through all the varieties of animal and vegetable manures, we land in a peat bog. The substance under our feet is analyzed, and found to be cow dung, without its musky breath of cow odour, or the power of generating ammonia. That process is over—a part of the ammonia remains, still evident to the senses by adding caustic potash. It exists in part, either as a component of crenic and apocrenic acid, or as phosphate of ammonia, and when the presence of ammonia is added to the salts, whose existence has already been pointed out, it may be said, that peat approaches dung, moistened with the liquid evacuation of the animal.

The power of producing alkaline action, on the insoluble geine, is alone wanted to make peat good cow dung. Reviewing the various matters from whatever source derived, solid or liquid, which are used as manure, all possess one common property, that of generating ammonia. The conclusion then of this whole matter, is this; the value of all manures, depends on salts, geine, and ammonia; and it is directly in proportion to the last; it follows, that any substance affording these elements, may be substituted for manure.

The great question comes, how is it to be given to peat, a substance which, in all its other characters, is so nearly allied to cow dung, that lacking element ammonia? How is that to be supplied? Without it, cow dung itself would be no better than peat, nay, not so good; for in peat, nearly one-half of the geine, is already in a soluble state. Passing by the fact, already alluded to, that peat contains traces of ammonia, which evolves when treated with caustic potash, exerts its usual action; it may be added, that possibly in the process of vegetation, when the decomposing power of the living plant is exerted on peat, and the silicates, caustic potash is produced and ammonia evolved. Considering peat as a source of nitrogen only, it is evident that the action of alkali is of the highest practical importance.

By then, the addition of alkali to peat, it is put into the state, which ammonia gives to dung. The question then arises, how much alkali is to be added to swamp muck or peat, to convert that into cow dung? Recurring to the doctrine of chemical proportions, whose value to the farmer is thus made evident, it will be remembered that the equivalent of potash and soda, that is, that proportion of one which can take the place of the other, is as 2 to 3; that is, 2 parts of soda are equal to 3 of potash. If either of these is compared with ammonia, it will be found that one part of ammonia is nearly equal to two of soda. When these substances are met with in commerce, it is in the state of salts; as carbonate of ammonia of the shops, or white ash or potash and pearl ash. The equivalent of these is deduced from determining the pure alkali of each, adding the equivalent of carbonic acid, and to this the usual impurity. It is found that

59 parts of ammonia, are equal to  
58 " soda, or white ash, or to  
72 " 1st quality pot or pearl ash, or  
86 " 2d quality pot or pearl ash.

Without violence to chemistry, the composition of cow dung may be stated as follows:

Geine,	15.45
Salts,	0.95
Water,	83.60

100.00

In 100 lbs. hardly 1-6 of any value in agriculture! Only about 1-6 of cow dung is soluble geine. The insoluble is converted to soluble by the action of the evolved ammonia."

#### FORCE OF EXAMPLE.

We copy with feelings of infinite pleasure, the following article from the *Farmers' Cabinet*, as it goes not only to illustrate the difference between bad and good farming, but to prove the salutary influence in whole neighborhoods of the good example of a single individual. It has been said with as much truth as satire, that "precepts govern and examples fail;" but while we are reluctantly compelled to subscribe to the propriety of the remark, in the general, in the ordinary transactions of life, we are not disposed to indulge in the opinion, that the moral perceptions of the people have become so blunted, as not to see the beauty of an example looking to the happiness and well-being of the community—to the improvement of the soil—and consequently to the promotion of the interests of mankind. Had we not obeyed such impulses, and acted upon those principles which are allied to them, the single instance related in the subjoined article, would make us a convert to the doctrine, that man is a creature so docile in his nature, so tractable, and so much within the control of noble incentives, as to be operated upon more advantageously by the force of wholesome examples, than by those of a preceptual character.

*Mr. Editor*,—Twelve years since, I resided in a district of country which enjoyed superior agricultural advantages in respect to soil, climate, water and wood, and a convenience to the best of markets; still there was a perceptible want, throughout, of enterprise and prosperity among the farmers. Of corn, the average crop seldom exceeded 20 bushels per acre, and that of every other kind of grain was in proportion. Wheat, however, they would seldom attempt to raise, unless upon new land, or that which had been favoured by a scanty supply of manure which their barn-yards annually afforded. Their farms appeared in a solvent condition, and the several kinds of work were indifferently and unseasonably performed. Their cattle and sheep were entirely destitute of shelter, and left at all seasons exposed to the peltings of the pitiless storm—their houses and out-buildings were, in general, very ordinary, and many of them old and much dilapidated. The best farms in that neighborhood, had they been exposed to sale at that time, could have been purchased for less than \$40 per acre. But "a change came o'er the spirit of my dream." At this day, that same neighbourhood is widely reputed for its excellent farmers, its productive soil, and abundant crops, of which wheat is now the principal, and generally yields from 25 to 30 bushels, frequently 35, and sometimes 40 bushels per acre. Rye, corn, barley and oats are also cultivated to a moderate extent, and with like success. Their old shabby buildings have chiefly given place to new ones, which, by their neat and substantial appearance, indicate the good taste and the good judgement of their proprietors. Do you inquire by what cause, by what miracle, so great a change, so great a reformation, has been effected within so short a time? I answer, all this has been accomplished by the good example of one good farmer. The farmer to whom I refer, removed into that neighbourhood in the fall of the year 1830, and undertook, in behalf of a widowed relation, the management of her farm, which contained about 125 acres of arable limestone land. The proceeds of this farm, under its former occupant, had been annually insufficient to pay the expenses of its own cultivation and support his family. But its new overseer turned over a new leaf, and that farm is now one of the

most productive, and the most valuable of any in the township in which it is situated. The first step towards improvement with this man was to dispose of all the poor, old, worn-out cattle and horses which he found on the farm, and supply their places, not by good ones merely but by the very best he could procure, regardless of the price. The farming utensils from the least to the greatest underwent a close inspection and a thorough repair. A shelter was provided for his cattle and sheep, and a comfortable pen for his hogs; a lime-kiln was built, and all other necessary improvements were immediately made. In his farming operations there was nothing peculiar, or different from those of his neighbours, except in their seasonable and perfect performance. In the early part of spring his fences were thoroughly repaired; the stones were collected and hauled from the fields designed for mowing, and from other places where they might interfere with the proper cultivation of the land, or prove detrimental to the growing crops. One kiln of lime was burned in the spring and placed on his corn ground, at the rate of 60 bushels to the acre, and another at midsummer, and applied in like quantity to an inverted clover sod, as a preparation for wheat. His corn was planted with care in hills three feet apart each way, and three grains in a hill; it was twice harrowed, twice plastered, twice ploughed, and all at the proper season. A part of his wheat was sown on open fallow, which had received a heavy dressing of manure in the spring, and had been twice ploughed and once harrowed before harvest, and once ploughed afterwards. A part also was sown on clover lay, which had been enriched by ploughing under a luxuriant growth of grass, and which, with the lime applied as before stated, and thoroughly harrowed and incorporated with the soil, always proved an excellent preparation for wheat, and insured a bountiful crop at the ensuing harvest. I need scarcely add, that his crops of every kind were uniformly good, and far surpassed those of his indolent and improvident neighbors, and afforded him a clear profit of more than \$1500 a year. But at length his success and increasing prosperity attracted the notice, and excited the emulation of the surrounding farmers, and led them gradually to imitate his example, until finally most of them became good farmers, and many of them superior; and generally they have rendered themselves independent, and enhanced the value of their farms at least 100 per cent. And instead of the sloth, ignorance and poverty which disgraced the agriculture of that region of country a few years since, it is now distinguished for its industry, wealth and intelligence, with every concomitant blessing—all of which is the effect of the GOOD EXAMPLE OF ONE GOOD FARMER.

*Rural Retreat, Va., Feb. 23, 1842.*

#### AGRICULTURAL ANALYSIS.

To determine the value of soil, or to be able to correct any fault in the original constitution, or any deficiency arising from improper cultivation, it is necessary that the nature and proportion of the substances composing it should be understood. In agriculture this examination is termed analysis; and in a simple, yet still effectual method, may be practised by every farmer. The implements used are a pair of scales, accurate to the tenth part of a grain; a crucible; some muriatic acid, and a few small vessels of china and glass.

The earth to be tested by the farmer, should be taken from a few inches below the surface, and be an average specimen of the field, or the soil to be examined. The quantity to be examined, say two or four hundred grains, to be slightly pulverized or well mixed together. Put of this, two hundred grains in a crucible, and heat it to three hundred degrees of Fahrenheit, or bake it in an oven heated for bread for fifteen minutes; cool and weigh. This will show the absorbent power of the soil, and as this is depending mainly on the animal and vegetable matter, if the loss is considerable, it is decisive proof in this respect of fertility. The absorbent power varies from one to twelve per cent.

After weighing, heat it again in the crucible to a red heat, and until the mass shows no bright or sparkling particles, stirring it with a glass or iron rod; cool and weigh, and the loss will be the animal and vegetable matter in the soil.

Take two hundred grains of the dried earth, mix it thoroughly with a gill of water, by stirring it for several minutes. Let it stand for three minutes, and turn off the muddy water into another glass. Dry the sediment in the first glass at high heat, weigh, and it gives the silica



contained in the soil. Let the water turned off settle clear, turn it off, dry it at a high heat and weigh: this gives the alumina or clay.

Put into a suitable glass or flask, one-fourth of a gill of muriatic acid and water in equal proportions, and balance the scales carefully. Put into this mixture one hundred grains of the earth, let it stand till all the effervescence has ceased, which will sometimes be an hour, or more; carefully note the weight required to again balance the scales, and that may be set down as the weight of carbonic gas expelled, say six grains. Then as forty-five is to fifty-five, so is this weight to that of the base, or the lime. In this case lime would be seven and one-third per cent.

To ascertain if the earth contains iron, stir the muriatic acid and water with a strip of oak bark, and if iron is present in the liquid, the bark will turn dark. To ascertain the quantity, put in prussiate of potash, till it no longer forms a blue precipitate, let it settle; heat the deposit to redness, carefully weigh the remainder, which is oxide of iron.

To determine the presence of gypsum, take one hundred grains of earth, mix one-third the quantity of powdered charcoal, keep it at a red heat in a crucible for half an hour. Then boil the earth in a pint of water for thirty minutes, filter the liquor, and expose it for some days in an open vessel. A white deposit will be sulphate of lime, and the weight will determine the proportion.

These processes are all simple, and can be performed by any one. By them we obtain, 1st, the absorbent powers; 2d, the amount of animal and vegetable matter; 3d, the silica or sand; 4th, the alumina, or clay; 5th, the carbonate of lime; 6th, the oxides of iron; and 7th, the gypsum, or plaister of Paris. The salts exercise a great influence on vegetation; but as they principally depend on the animal and vegetable matter in the soil, and as the determining their qualities and kinds is too difficult for the analysis of the farmer, the processes are omitted. The above ingredients are all that exert a marked influence on the fertility of soils, and on their proper proportion its goodness depends. If soils contain too much silica or gravel, they are porous; and if too much clay, retentive. The last is usually the worst fault, and may be known by the water standing upon it after rains, remaining unsettled for a long time, owing to the clay held in solution. Winter wheat kills on such soils; on calcareous, gravelly ones, rarely. Good soils usually contain from sixty-five to seventy-five of silica; from ten to sixteen of alumina; from four to ten of lime, and varying proportions of vegetable matters, animal and mineral salts, &c. The analysis of soils forms one of the most decided steps in the improvement of agriculture, as it clearly points out what is wanting to remedy any defect, and give ease of working, and abundance in product. Every farmer should understand the nature and composition of his soils, and may do so with little time, and at a mere trifle of expense.

#### THE POTATO—IMPORTANT FACTS.

A writer in the March number of the Farmer's Cabinet, gives the following statement as to the production of the Potato. Believing it, if true, to be of some importance to our readers, we lay it before them.

"It is perhaps not generally known that in the potato there are two parts, which, if separated and planted at the same time, one will produce tubers fit for the table 8 or 10 days earlier than the other. This fact has fallen under my own observation, and is the plan I now pursue in order to obtain an early supply for my table, fine and very mealy. The apex or small end of the potato, which is generally full of eyes, is that part that produces the earliest—the middle or body of the potato produces later, and always large ones. The butt or naval end worthless, except for feeding stock, and, if planted, produces very indifferent small ones, and often none at all, the eyes, if any, being imperfectly formed. The potato being cut two weeks before planted, and spread on a floor, that the wound may heal, separating the small end from the middle, then cutting off the naval or butt, the body or middle of the potato is then divided into two pieces lengthwise, taking care to have always the largest and finest selected, being convinced that if none but large potatoes are planted, large ones will be again produced—small things produce small things again, and therefore no small potatoes should be planted; this practice is too prevalent, and may account for the many varieties and small potatoes met with in our markets. Who would not prefer a large mealy potato to a small one, that will take hours to boil soft, and then may only be fit to feed the cattle with?

"For several years I have adopted the plan of putting potatoes into the ground late in fall, covering them with manure, sometimes with tanners' waste bark, and always have succeeded in raising a fine early crop. Last fall I had taken up some as fine and large Mercer potatoes as any one could wish; they were covered with tan six inches thick the preceding fall; many weighed sixteen ounces. No particular care or attention was bestowed upon them through the summer, the tan not permitting any weeds to trouble them, or to draw out the nourishment from the earth, they had therefore all the benefit of the soil, kept moist and clean by the tan, for tan will keep the ground moist and clean, and in an improved state in the driest season. I have found the great advantage of it to my asparagus and strawberry beds, which are annually covered with it.

"The potato I consider so valuable and indispensable a vegetable, and having never seen a suggestion in print of separating the potato and planting each by itself, that I have been induced to send you this communication. Perhaps some of your readers will try the experiment planting separately each part of the tuber, believing that the potato may be much improved by a due regard to the above suggestions.

"Lancaster, Feb. 25, 1842.

J. F. H."

**CULTIVATION OF COTTON IN INDIA.**—A correspondent of the Alabama Journal thus expresses his conviction of the complete success of the experiment of planting cotton in the East Indies.

Intelligent gentlemen of England, who have every facility for forming a correct opinion, estimate the crop in India of 1841, at 800,000 bales, which is more than the entire crop of the United States in 1827, and more than our total exports in any year prior to 1832—showing an increase more rapid than at any time in the United States since its introduction into the country. These facts ought to convince our planters that within five years they must prepare to grow cotton at four to six cents a pound or turn their attention to something else. Should any one doubt the ability of India to increase her production in a ratio proportioned to the one above noticed until it reaches a point sufficient not only to supply the entire wants of Great Britain but of the whole world, let him examine the subject fully and impartially for himself. With double the extent of territory adapted to cotton, a soil of the richest character, a population of 120 millions of British subjects, the laboring portion of which receive but 4 to 6 cents a day, if a fresher impulse is given it is hardly possible to form an estimate of the extent to which the culture of cotton may be carried within the next ten years in British India. The moment England can obtain her supplies from her own dominions, that moment she will place a duty on our cotton. On this question a party both numerous and powerful under the influence of a morbid, fanatical philanthropy, will urge her forward even at great sacrifice if necessary, with the hope of destroying the peculiar institutions of our southern States by rendering the products of slave labor as near valueless as possible. Is it not time then for our planters to take warning and prepare themselves for the worst? The market at home they may rely upon it in ten years will be the only market of any value to them. Let them plant but half their usual quantity of cotton and apply the other half of their force to the production of something else. By so doing, they will get quite as much money for what they do make, and save in addition the proceeds of the other half."

**SOUTHERN STAPLES.**—In the year 1766 the Colony of Georgia exported 30,660 lbs. of Indigo; it was then the chief staple of the Colony. The exportation of rice for the same year amounted to no more than 8,774 lbs. Cotton was not cultivated at all.

Indigo being an article of great importance to the British manufacturers, efforts were made to establish the culture of it in India. In 1753 Bengal began to send indigo England, and in a short time it ceased to be cultivated to any extent in America. India now supplies the chief portion of all the indigo used in manufactures.

The Savannah Republican referring to these facts remarks that cotton and rice, now the staple products of Georgia, are articles which scarcely entered into the idea of the founders of the State; and the significant question is asked—how long will these continue to be the staple commodities of Georgia? Can they, from the present aspect of affairs, long maintain their supremacy? It is cer-

tainly, adds the Republican, "a question of great moment; for as England is weaning herself from our cotton fields, and looking for her supply to her own East India possessions, it becomes important to know, what we shall do with the surplus of our own wants, and to what we shall turn for a new and commanding staple. As the limits of our cotton market become more and more narrowed down, so shall we be more and more compelled to search out new methods for its consumption, or new products for exports."

**FARMING ABOUT BOSTON.**—Mr. Colman in his last agricultural report states that from one farm in the vicinity of Boston, turneps to the amount of \$1500 have been sold in a single season, from another \$1200 worth of winter apples; from a third \$800 worth of strawberries; from a fourth \$300 worth of peaches; and from a fifth which has come to his knowledge, \$600 worth of early potatoes from only two acres of land.

#### REMEDY FOR RHEUMATISM, &c.

Brown's Hotel, March, 1842.

Messrs. Editors: I crave at your hands an insertion of the enclosed receipts for Rheumatic and pseudo-rheumatic pains. I have known them to effect cures, after proper preparation, when all other means have failed. They have been a long time in the hands of an empiric, and I have gotten possession of them by the death of the original holder. I deem it my professional duty to have them published, and for this purpose need not appeal to your well-known humanity. I append my name that I may give them its feeble authority, and enable sufferers to have them more fully explained.

Very respectfully,

THOMAS G. CLINTON, M. D.

#### Receipt for making the Pisan of Calas.

Take 12 ounces of Sarsaparilla, 2 drachms of Calomel, 1 ounce of Senna, 6 drachms of Coriander seed,  $\frac{1}{2}$  drachm Alum. Take the Sarsaparilla and Calomel, wrapping the latter in a linen towel, and put them in a suitable bell-metal or copper pot. Throw in five bottles of water, and mark the height; one-fourth higher make another mark, and then add ten bottles more of water. Boil these down to the higher mark, and then put in wrapped in another towel, the three remaining drugs. Boil all down to the lower mark; take them then from off the fire, cool, strain, and put the decoction in five bottles.

Replace the drugs in the pot, with ten bottles of water; boil down to the lower mark; cool, strain, &c. as above, and you have prepared the second pisan.

**Directions.**—Take a bottle of the first pisan during a day; that is, morning, before dinner, and evening. Take also, at pleasure, during the same time, a bottle of the second pisan. If they operate too powerfully, cease taking No. 2. If in 30 days you are not cured, discontinue the pisans for some time, and then recommence for 30 days more, and so on.

Eat no salt, crude or unripe food, spice, &c.; drink no strong liquors.

#### A similar receipt.

Take of Sarsaparilla 12 ounces, Sassafras 6 drach's, Guaiacum 6 grains, Calomel 2 drach's, Coriander 6 drachms, Alum 30 grains, Senna 2 drachms. Boil the three first drugs in fifteen bottles of water down to ten; put in the other four, and boil down all together to five bottles.

Remember to wrap the calomel and alum, and suspend them so as not to touch the pot.—*Nat. Intel.*

**BURNS AND SCALDS.**—The pain of a burn or scald on such a part as the finger may be greatly assuaged by instantly dipping the part in cold water, or applying to it any cold moist substance—mud from the street is as good as anything. But the sudden dipping of the whole hand or foot into cold water, may prove dangerous to a delicate person, by causing a too quick flow of blood to the head, and therefore should be resorted to with extreme caution. The safest and best application to either a severe burn or scald is soft cotton. In many cases it is applied perfectly dry to the part, and in others it is wetted on the side next the sore with a mixture of lime-water and linseed oil. A rag wetted with some substance may be used where cotton cannot be had, but cotton is best, and no house should be without a quantity of it.

The foregoing recipe is valuable and should be preserved by every family. A mess of scraped potato is excellent to be bound on the part burnt as soon as possible.



We have been favored by Messrs. *W. Wisson & Sons*, merchants of this city, with a present of small parcels of six different varieties of Beans, brought here in one of their vessels from Chili, South America. The first is a small yellowish bean with purple eyes, called *Frijoleto de Castilla*, or small beans of Castile; the second, *Frijol Prieto*, or black beans of Peru, and as their name would indicate, they are a very dark purple black, of about the same size of the bean long cultivated here called the Quaker—the third is a greyish bean of great specific gravity, striped and speckled with yellow, called *Frijol Chileno Cocacho*, or Chili Bean—the fourth is named *Frijol Chileno Amarillo*, or yellow Chili bean; they are of medium size, dark yellow, generally, with some few tinged with a purplish hue—the fifth, is the *Frijol Chileno*, or Chili bean, its color is a greyish white, with a purple eye; this bean is of good size—the sixth is called the *Pulares*, or Lima bean, fully a fourth larger than those raised in our gardens here, and will doubtless prove a valuable acquisition. We will be happy to divide these beans with our friends, and hope to be enabled from our own planting to supply at a future day, a more extended distribution of them. We cannot close this paragraph without expressing our acknowledgements to the Messrs. *W.* for this very acceptable present, and trust, that their good example will not be thrown away upon their commercial brethren. Could our merchants trading to distant countries be induced to direct their captains and supercargoes to make selections of choice seeds for distribution, the amount of benefit they might thus be enabled to confer upon our country would be immense.

#### CORN STALK SUGAR—OIL AND STEARINE FROM LARD.

We have had the pleasure of receiving a pamphlet published by "The National Agricultural Society," upon the above subjects. For this favor we are indebted to the Hon. Hy. L. Ellsworth, the Commissioner of Patents, who will receive our warm acknowledgements for this acceptable testimonial of his thoughtful regards. It contains an able and highly interesting Essay by Wm. Webb, Esq. of Wilmington, Del. delivered by him before the National Agricultural Society, on the 16th Feb. last, which Mr. W. very modestly entitles "Some remarks on the manufacture of Maize Sugar." Its perusal was to us a source of great interest, and as the manufacture of Sugar from Indian corn is likely to become a branch of American Agricultural industry, we lose no time in presenting it to our readers, and have commenced its publication this week. Appended to Mr. Webb's essay, is an extract from *Annales de la Societe Polytechnique Pratique*, No. 22, highly confirmatory of Mr. Webb's views. This pamphlet also contains two other papers, the one from Mr. C. Morfit, and the other from Mr. John H. Smith, on the mode of manufacturing oil and stearine from lard, &c. These latter communications are upon subjects of deep concern, as they may tend to impart additional value and diversified use to an agricultural product which is annually increasing in magnitude.

#### THE BADEN CORN.

We subjoin a letter from Mr. *Tho. N. Baden*, upon the qualities of his corn, as also upon his method of cultivating it. Mr. B. has been a successful corn grower, and after years of patient devotion to the object, has so far improved an old variety of corn, as to entitle it to be considered a new one, and wear in honor the appellation of "*Baden Corn*." This corn we have heretofore cultivated, know it to be very productive, and shall plant it again this year for a part of our crop, being induced so to do from our convictions of its superiority. Mr. Baden recommends planting about the last of April, or during the first week of May, but we think a much earlier period might be selected even in most parts of Maryland, in ordinary seasons; and south of us, in many places, it might be

planted a-month or more earlier in perfect safety. The crop we planted of it was got in on the 9th and 10th of May, too late by many days, but late as it was, the entire crop matured.

Near Nottingham, Prince George's Co. Md.  
March 26th, 1842.

To the Editor of the American Farmer.

Sir—No doubt you have heard a great deal said about my Corn—some people say they raise double the quantity on their fields that they did before they got it—and others that it is light and weak. I have no intention of saying much upon the subject—but perhaps a few words may not be amiss, and may possibly be a good service to some persons. I am willing that every body should enjoy their own opinion. (you know they will do it.) A few days ago for further satisfaction I weighed a bushel, struck measure, of this seed, such as I sent you, and it weighed 57 lbs. which shows it cannot be light nor weak, as I believe 56 lbs. is the standard—There are some varieties of corn of which I dare say a single bushel will outweigh mine—but take a barrel of ears of each, and shell and weigh them, and I think mine would weigh considerably the most. There is another great advantage that mine has: it will produce more from the acre. On the 15th day of Nov. 1839, two of my respectable neighbors measured one acre of my corn, and carefully measured its product, which was 16½ bbls. and I have their certificate on my book, (you know 10 bushels of ears is a Maryland barrel,) which if shelled would make 82½ bushels—but it will over-run considerably in shelling—this yield was notwithstanding it had been laid level to the ground by a hail-storm, and was very much damaged, on the 8th day of August, at the critical time of its silking and forming the ears. There is another and a greater misfortune than all that attends it—there has been a great deal of corn sold for the true seed, which has been so much adulterated, by being mixed with other varieties, that it had very little the appearance of the true kind; after crops had been raised from such seed, people finding it was very little if any better than the common corn, became much disappointed, and some of them wrote against the true seed, without knowing the fact, that they had never had it. But, Mr. Editor, if your friends will be careful to get the *genuine* seed, and prepare their land well, and lay it off 5 feet apart each way, and plant it the three or four last days of April, or two or three first days of May, and leave two stalks in each hill—and if the land is rich they may leave three stalks in each hill—and work it once in twelve days, or at most not let it exceed fifteen days, and keep up this rule until they lay by their crop, and pull off the suckers that put up from the roots when they get a foot or 18 inches high, and they will be certain of raising a good crop, agreeably to the strength of their land. Plough your corn three times after it comes up, and you may work it over the balance of the time as you please. Some persons contend the cultivator is best, but I differ from them. Let them, however, for example, try a part of their field each way; then they will be better able to judge for themselves. I will undertake to say, if they work their field entirely with the cultivator, if it should be a wet season, they will be pretty well overrun with grass; tho' I use the cultivator sometimes.

If you think, sir, this is worth a place in your useful and interesting paper, you are at liberty to put it in some spare corner. I am truly yours,

THOS. N. BADEN.

We trust that our friends in this county will generally place themselves in positions to enter the list as competitors for the prizes advertised by the agricultural society of Baltimore County. While success will afford to them the enjoyment of those pleasurable emotions, the offspring of generous rivalry—even defeat would be accompanied with benefits and gratifications, as it would demonstrate to a certainty, that however much the earth may have thus far yielded, its capacity for production is susceptible of great improvement.

THE PEACH CROP—The Annapolis (Md.) Republican says—"We regret to hear from an experienced farmer, and one every way capable of judging, that peaches were considerably injured by frost on Monday night last."

We learn that considerable damage was sustained in the vicinity of this city by the peach orchards.

#### PRUNING AND CULTURE OF APPLE TREES.

We have been permitted by an esteemed friend to publish the following letter from *E. Phinney*, esq. of Lexington, Mass. on the subject of pruning and culture of apple trees, and it gives us pleasure to say, that the soundness of the views of Mr. Phinney must strike the reader with peculiar force. Few, if any, enjoy a higher reputation as an enlightened agriculturist than does this gentleman, and from his long experience, in all that appertains to the business of farming, his observations upon those branches discussed in his present letter are entitled to the profoundest consideration.

"On the subject of pruning Apple trees, which is your first enquiry, a volume might be written—In a few words, it is difficult to give a good top to a tree unless pruning is begun in the nursery—like too many of our children, if suffered to grow at random in youth, it is difficult to get them in proper trim afterward. If however this has been neglected, and the top is too thick and limbs interfere and chafe each other, these should all be taken out so that no limbs shall cross each other—and in doing this, regard should be had to an equal balance of the top. A tree with an undue proportion of its burden on one side is more liable to be injured both in root and branch. I have never known an instance of too severe pruning—we are all inclined to let too much wood grow, by which the quality of the fruit is injured. No better general rule can be adopted than to cut out all such limbs as interfere and cross each other; not only those that interfere now, but such as from their direction will be likely to interfere hereafter.

"The best time of pruning is while the tree is growing most vigorously. With us this time is about the first of June—the process of healing then commences quickly, and the wound is not so likely to canker. Where however a limb of considerable size is taken off, in order to avoid canker, it is best to cover the wound with a little common mortar, made of sand and lime, and instead of hair to mix with it, I use *bristles*, which are much more durable than hair, and will effectually secure the part from canker, and will remain on till the wound is nearly healed over. In Maryland, I should think the best time for pruning would be from first of May to first of June.

"Thousands of valuable trees in this part of the country have been brought to premature decay and death by pruning in the months of February and March.

"The best manure for apple trees is the top mould and leaves gathered from the woods mixed with a little lime or ashes. Strong manure should not be applied directly to the roots of the trees. The best way to promote the health and growth of trees is to keep the ground in a high state of cultivation; let the crop of whatever is planted be well manured and well cultivated, and they will require no other nourishment. Trees will not do well in grass ground if ever so much manured. You may as well plant corn in grass ground as trees. I would as soon lay my trees upon the back log and expect them to grow, as set them in grass land. If the land is tolerably good, fifteen cart loads of stable manure to the acre, spread on and ploughed in, in the spring of each year, will be sufficient for the growing crop, and at the same time afford sufficient nourishment to the trees. Plough close to the trees; if a root is now and then broken by the plough the tree suffers but little or no injury. Too much manure applied directly to the roots operates like stimulus upon the human constitution, and often induces premature decay. The same manuring and cultivation that will produce a good crop, will give a healthy, vigorous growth to the trees.

E. PHINNEY."

For the American Farmer.

#### TO PROTECT FRUIT FROM LATE SPRING FROST.

Sir—Many expedients have been resorted to for the protection of fruit from the blighting influence of late frosts. Throwing a sheet over the tree, hanging iron upon it, kindling a fire under it, &c. have each been found to have a beneficial influence, but none have been more efficient than the experiment which I am about to describe.

My friend, Major Ruff, who is a virtuoso, lately informed me that many years ago he saw it stated in a French paper that by throwing a hempen rope over the top of a fruit tree, when in bloom or near the time of blooming, and by letting its lower end touch the ground, the tree would thus be protected from the influence of



frost. This I thought quite rational and philosophic, accordingly made the experiment. To prove more fully the *modus operandi* I took two dishes half filled with water, and set them a few feet distant, under the tree, on the night before an expected frost, the tree being nearly in full bloom. Throwing the rope over the top of the tree I let the other end hang in the water of one of the dishes—the event proved the correctness of the theory. There was a hard frost on the morning of the 27th inst. and the dish into which the rope was deposited, contained ice of the thickness of a dollar, while that in the other dish was scarcely of the thickness of paper.

The philosophy of the above experiment is this: the rope, which was previously wetted, was a conductor of heat; the air, and of course the limbs of the tree, became colder in the night than the earth—the rope conducted the heat from the earth to the tree, thus keeping up an equilibrium and preserving the tree from frost.

As far as my observation extends, the critical time for fruit is long before it is in blossom; but it is nevertheless true, that severe and protracted cold at that time, or even later, will destroy the fruit. This was the case last year. The fruit was killed by severe frost after it had been formed.

There is not in my mind a doubt that by attaching a rope to each tree of choice fruit, and thus letting it permanently remain through the winter and spring, that the fruit would be secured from the effects of frost.

To the incredulous and the supercilious, who balance their grist all their lives with a big stone—who, sufficiently wise, despise knowledge and instruction, the above may appear unworthy their attention. Let such be informed that it is not less philosophic than lightning rods attached to buildings to protect them from the influence of electricity—Let them be informed that

"There are more things in Heaven and Earth  
Than their philosophy has ever dreamed of."

W. L. HORTON.

Woodlawn, Harford co. March 29th, 1842.

**The Wheat Crop**—Wherever the wheat crop may be too rank, the farmer should turn in his flock of sheep to eat it down, by so doing he will increase the chance of its heading well.

**NEGLECT OF DUTY.**—Any overseer, manager, or bailiff on a farm, who delays having his employer's tools and implements repaired until they are wanted for use, should be dismissed as unworthy of confidence; and he who is his own manager and neglects their timely repair, should be condemned to a month's ploughing amongst ivy stumps.

**SOAP SUDS.**—Instead of suffering your washer-woman to throw out the soap suds about the kitchen door, make her pour them, as made, in a barrel in your garden, and water your plants of all kinds with them.

**Another large Oat crop.**—The March number of Gov. Hill's *Monthly Visitor* contains an account of a crop of oats raised by him in 1841, which though neither as large as those of Mr. June, or Mr. Thrall, is still an extraordinary yield, and very evidently tends to illustrate the position we have often assumed, that oats is a grain which deserves much more attention than it generally receives. Gov. Hill grew his crop on a four acre lot. The land on which the oats were raised was bound out grass ground giving less than ten hundred of indifferent hay to the acre. It was ploughed twelve inches deep in 1840, and planted with corn and potatoes, manured with 150 cart loads of common stable manure, a part turned under the turf, and a part laid out and exposed after ploughing. The four acres gave the first year about 100 bushels of Indian corn and 300 bushels of potatoes. In the spring of 1841, as we have before premised, the land was sowed in oats and produced 300 bushels, being an average of 75 bushels to the acre.

**BEAT IT WHO CAN.**—There was grown upon the farm of John B. Kelley, Esq., of Moore county, last season, a Pumpkin, measuring six feet nine inches in circumference, and weighing 145 lbs. This was one amongst many others of nearly the same size. Beat this if you can, ye Messrs. Orange and Duncombe.—*Fayetteville Observer.*

### Clearing and Cultivation of Land in New Hampshire.

—The following is an extract from an article in the last *Monthly Visitor*, giving an account of the method of cultivating newly cleared land in the State of New Hampshire. The plan of raising potatoes is simple enough in all conscience, and what is better than all, saves all trouble of ploughing in stumpy ground, a thing above all others, perhaps, the most trying to both man and beast. We commend this notable yankee system to all proprietors of newly cleared grounds.

"We have heretofore endeavored to impress upon our readers the value of our rough mountain lands. There yet remains much land in the upper counties of this State considered of little value that may be made valuable. In conversation with WINTHROP FOLSOM, Esq., of Dorchester, a few days ago, we gathered the following facts:

Four or five years ago he purchased a lot of eight acres of uncleared rocky land, for which he gave three dollars the acre: this land, covered with a growth of wood, he cut down, cleared, burnt and fenced at an expense of eight dollars per acre—making the cost of land eleven dollars per acre. It was planted with potatoes: he charged himself one dollar for every day's work done, and twenty-five cents per bushel for the seed potatoes. He called the potatoes raised that year on the ground worth sixteen cents the bushel; and he found the gain of this year's operations, above the cost of land and clearing and the expense of seed and labor, to be ninety dollars, or nine dollars per acre. The next succeeding year he raised on the same ground four hundred bushels of oats: since that time the same land has produced a decent crop of hay, and is now good pasture land.

Mr. Folsom has more recently purchased a lot of three hundred acres of these wild lands at the price of one dollar an acre. On this land he has commenced clearing. His first clearing was fifteen acres at the cost of eight dollars an acre. His first crop of potatoes on this ground was 3100 bushels. Three thousand bushels sold to the starch manufacturers at one shilling the bushel, brought \$500—one hundred bushels drawn home worth \$17—making the year's product \$517. The cost of land, fencing and clearing, \$160, would leave the clear gain of this year's operations on these fifteen acres, three hundred and fifty-six dollars. The second year (which was the last year, when the crop suffered much from drought) the same land produced 475 bushels oats, worth at 50 cents 237 50, and 14 bushels of rye worth \$1.00, making \$251. After the two crops were taken off, it would not be high to value this land at five dollars the acre.

The method of planting the potatoes is extremely simple. After the ground has obtained a good burn, the planter proceeds with a bag of cut potatoes swung over his shoulder—strikes a sharp hoe into the ground through the outside root turf—covers with the foot, making each hole at the distance of about eighteen inches in the row, and the rows three feet apart. Planting in this way makes three fair days' work to the acre, worth \$2.25. The digging of an acre of potatoes at four shillings per day, six days' work, is worth \$4. No hoeing during the season is necessary; and so well does the seed operate in the ground, that the vines often grow to a sufficient size to cover the land. The whole expense of raising potatoes on burnt ground, after the ground is cleared, Mr. Folsom informs us, will not much exceed six cents a bushel."

### The United States Gazette, and the Pacific Tomato.

—The U. S. Gazette, many months since, stated that an officer on board the Exploring Expedition, had sent a present to a friend in Philadelphia, of some Tomato seed, which he had got in the Pacific, whose fruit was represented as being as superior to the tomato grown in this country, as was that to the ball on the Potato vine. The object of this notice is to learn from our friend of the U. S. Gazette, whether any of those seeds, or their product, can be procured. We do not want them for ourself, but for an old friend of agriculture, who though now treading on the confines of the land of spirits, feels as much interest in all improvements connected with terra-culture, if we may use the term, as he did when he was in the gristle of his manhood. We need not add, that it will give us great pleasure at any time to reciprocate the favor.

### MEANS OF DESTROYING THE CURCULIO.

The following plan for destroying the Curculio, is from the pen of one of the most eminent nurserymen in our country, who is distinguished alike for his practical good sense, and scientific attainments.

The Curculio is one of the greatest enemies of the plum; indeed, in many sections of the country, the whole crop is frequently swept off by its attacks. When its habits are well known, however, a little care will enable us to rid our gardens of these insects, so destructive to stone fruit.

The Curculio is a winged insect, which emerges from the ground about the time when the trees are in blossom, and punctures the fruit almost as soon as it is formed, depositing its eggs in the tender skin of the swollen germ. When the fruit has reached one third of its size, if we observe it closely, we shall discover the scar of this puncture made by the insect, in the shape of a semi-circle or small crescent, about a tenth of an inch in breadth. The egg has now taken the larva form, and the latter is working its way gradually to the stone or kernel of the fruit; as soon as it reaches this point, the fruit falls from the tree, and the worm now leaves it in a few days, and finds its way into the loose soil beneath the tree. Here it remains until the ensuing season, when it emerges in a winged form, and having deposited its egg to provide for the perpetuity of its species, perishes.

As it is found that the Curculio, though a winged insect, is not a very migratory one, the means taken to destroy it in one garden are not without efficacy, though the neighboring orchards may not receive the same care. As the fruit, when it falls from the tree, contains the larva, it is evident that if we destroy it before the insect has time to find its way into the soil, we shall destroy, with it the Curculio. In small gardens, it is sufficient to gather all fallen fruit every morning, during the period of its fall from the tree, and throw it in the hog-pens, when the whole will be speedily consumed. In larger orchards, where it is practicable, the hogs may (the trees being protected,) be turned in for the short time in the season while the fruit is dropping, and they will most effectually destroy the whole race of insects of the current season. Indeed, in large plum orchards, this practice is found a very effectual remedy for the attacks of the Curculio.

In small gardens that have come under our notice, formerly much troubled with the attacks of this insect, where the practice of gathering the fruit and destroying it daily for a short period, has been pursued, the insect failed to make its appearance after a couple of years, and the trees have borne abundant crops of fine fruit. In addition to this, we would recommend the application of clay about the roots of plum trees, in very light sandy soil.

It is sometimes the case that the plum will be many years in coming into bearing, where the richness of the soil induces too great a luxuriance of growth. When this is the case, the ground should be partially removed from the roots, which should be pruned or reduced in number one fifth or one fourth, and the soil replaced. This should be done in the autumn, and will rarely fail in bringing about a profusion of blossom buds and a good crop of fruit.

A. J. D.

Newburgh, N. Y., Feb. 1842.

**GRAPES.**—We are pleased to see that the culture of that delicious fruit, the Grape, is gaining that attention by our citizens it so richly deserves. Dealers in the article inform us, that the demand for Grape vines this year has increased ten-fold. The varieties most esteemed are indigenous to North America, and the three the best that have been cultivated here, the Catawba, the Isabella and the Scuppernon are natives of North Carolina, and we have been informed that several still better kinds are found growing abundantly along the borders of the prairies and rivers of Texas. Two or three of the best varieties of these have lately been brought from that country by our friend DR. MOSHER, to whom we are under obligations for a great variety of the choicest fruits that have been introduced among us.

A few of the Texas Grape, as well as a great variety of fruit trees can be obtained by calling on the Dr. at the corner of Vine and 3d sts.—*Cincin. Repub.*

"Leave not until tomorrow, work which should be done to-day," is a motto which every farmer might, with advantage, have painted on the lintels of his barn door.



SOME REMARKS ON THE  
MANUFACTURE OF MAIZE SUGAR,  
By William Webb, of Wilmington, Del.  
(Published by the National Agricultural Society.)

The most profitable application of labor is a desideratum too frequently overlooked or disregarded by those who attempt the introduction of new manufactures into a country. All calculations of advantage which is to result from the production of any article, must be made with due regard to this point, or practice will prove them to be erroneous.

Fully impressed with this truth, the most rigid examination is invited into every thing now offered, so that, as far as possible, we may arrive at a correct decision respecting the real value of the proposed manufacture.

In common with many others, I have felt considerable interest in the plan for extending the cultivation of sugar in temperate climates, and have made many experiments: first, upon the Beet, and recently upon Maize, or Indian corn, in the hope of discovering some mode by which the desired end might be attained. The results from the latter plant have been extremely encouraging. The manufacture of sugar from it, compared with that from Beet, offers many advantages. It is more simple, and less liable to failure. The machinery is less expensive, and the amount of fuel required is less by one-half. The quantity of sugar produced on a given space of ground is greater, besides being of better quality.

An examination into the nature and productive powers of these two plants, will show that no other results could have been reasonably expected. It is a well established fact, that every variety of production found in plants is derived from the sap. It is also ascertained that the principal substance found in the sap or juice of many vegetables, is sugar. Therefore, the amount of saccharine matter produced by any plant of this description, may be estimated from an analysis of the fruit, seed, &c., of such plant, when ripe.

The grain yielded by corn, and the seed from beet in the second-summer of its growth, are nothing more than this sap or juice, elaborated by the process of vegetation, and presented to our view in another form.

Now, as it is contrary to the economy of nature to suppose that there should be any loss of nutritive matter in this change of sap into seed or grain, does it not follow that there must by the same difference in the quantity of sugar produced be the two plants as there is between the nutritive properties of beet seed and corn?

The juice of Maize contains sugar, acid, and a gummy mucilaginous matter which forms the scum. From the experiments of Gay, Lussac, Thenard, Kirchoff, and others, it appears that starch, sugar, and gum, are extremely similar in composition, and may be as readily converted into each other, by chemical processes, as they are by the operations of nature. Foreexample: starch boiled in diluted sulphuric acid, for thirty-six hours, is converted into sugar of greater weight than the starch made use of. This result goes to show that every pound of starch found in the seed of a plant, has required for its production at least one pound of sugar in the form of sap. If it be objected that this deduction is too theoretical to be admitted, it may be answered that experiment, so far as it has gone, has fully attested its correctness.

The raw juice of Maize, when cultivated for sugar, marks 10° on the saccharometer, while the average of cane juice (as I am informed) is not higher than 7°, and beet juice not over 3°. From 9½ qts. (dry measure) of the former, I have obtained 4 pounds 6 ounces of syrup, concentrated to the point suitable for crystallization. The proportion of crystallizable sugar appears to be larger than is obtained from cane juice in Louisiana; this is accounted for by the fact, that our climate ripens corn perfectly, while it but rarely if ever happens that cane is fully matured. In some cases the syrup has crystallized so completely, that less than 1-6th part of molasses remained. This, however, only happened after it had stood from one to two months. There is reason to believe that if the plant were full ripe, and the process of manufacture perfectly performed, that the syrup might be entirely crystallized without forming any molasses. This perfection in the manufacture cannot however be attained with the ordinary apparatus. Without any other means for pressing out the juice than a small hand-mill, it is impossible to say how great a quantity of sugar may be produced on an acre. The experiments have been directed more to ascertain the saccharine quality of the corn stalk, than the amount a given quantity of ground will produce; but the calculations

made from trials on a small scale leave no room to doubt that the quantity of sugar will be from 800 to 1,000 pounds.

This amount will not appear unreasonable, when it is considered that the juice of corn is as rich as that of cane, and the weight of green produce at least equal. Mr. Ellsworth, in one of his publications, states as the result of actual weighing and measuring, that corn sown broadcast yielded five pounds of green stalks per square foot; this is at the rate of 108½ tons to the acre.

My attention was first directed to Maize as a material for sugar, by observing that in some stalks the juice was extremely sweet, while in others it was weak and watery. On examination it appeared, that the latter had borne large and perfect ears of grain, while on the former, these were either small in size, or entirely wanting. The natural conclusion from this observation was, that if the ears were taken off in their embryo state, the whole quantity of saccharine matter produced by the process of vegetation, would be preserved in the stalk, from which it might be extracted when the plant was matured. But the idea occurred too late in the season to test it by experiment. A few stalks however were found, which from some cause, had borne no grain; these were bruised with a mallet, and the juice extracted by a lever press. Some lime was then added, and the defecation, evaporation, &c., began and finished in a single vessel. By these simple means, sugar of fair quality was produced, which was sent to the Horticultural Exhibition of our Society in 1840.

I have since been informed, through Mr. Ellsworth, that M. Pallas of France had discovered in 1839, that the saccharine properties of Maize were increased by merely taking off the ear in its embryo state. An experiment, however, which I instituted to determine the value of this plan, resulted in disappointment; the quantity of sugar produced was not large enough to render it an object. The reasons of this failure will be sufficiently obvious on stating the circumstances. It was found that taking the ear off a large stalk, such as is produced by the common mode of cultivation, inflicted a considerable wound upon the plant, which injured its health, and of course lessened its productive power. It was also found that the natural disposition to grain was so strong, that several successive ears were thrown out, by which labor was increased, and the injuries of the plant multiplied. Lastly, it appeared, that the juice yielded from those plants contained a considerable portion of foreign substance, not favorable to the object in view. Yet under all these disadvantages, from one hundred to two hundred pounds of sugar per acre may be obtained.

The manifest objections detailed above, suggested another mode of cultivation, to be employed in combination with the one first proposed: it consists simply in raising a greater number of plants on the same space of ground. By this plan, all the unfavourable results above mentioned were obviated; a much larger quantity of sugar was produced, and of better quality.

The juice produced by this mode of cultivation is remarkably pure and agreeable to the taste. Samples of the sugar yielded by it are now in the Patent Office, with a small hand-mill by which the stalks were crushed. Some of the same kind was exhibited to our Agricultural Society in October, 1841, accompanied with an answer to an invitation from its President, Dr. J. W. Thompson, to explain the mode of culture, and process of manufacturing the sugar.

The molasses, after standing as before mentioned, from one to two months became filled with small crystals, which, on being drained, exhibited a peculiar kind of sugar; the grain is small, and somewhat inferior in appearance, but still it is as sweet and agreeable to the taste as can be desired. A small sample of this sugar I have brought for your inspection. This product, from what was thought to be molasses, is a new and unexpected discovery, and discloses an important fact in the investigation of this subject. It shows the superior degree of perfection attained by the corn plant compared with the cane in any part of the Union. It is generally understood that the latter cannot be fully matured in any except a tropical climate, and the proportion of molasses obtained from any plant, is greater or less according to the immaturity or perfection of its growth.

The sweetness of the corn stalk is a matter of universal observation; our forefathers, in the revolutionary struggle, resorted to it as a means to furnish a substitute for West India sugar. They expressed the juice, and exerted their ingenuity in efforts to bring it to a crys-

talized state, but we have no account of any successful operation of the kind. In fact, the bitter and nauseous properties contained in the joints of large stalks, render the whole amount of juice from them fit only to produce an inferior kind of molasses. I found on experiment, that by cutting out the joints, and crushing the remaining part of the stalk, that sugar might be made, but still of an inferior quality. The molasses, of which there was a large proportion, was bitter and disagreeable. From one to two feet of the lower part of these stalks was full of juice, but the balance as it approached the top, became dryer, and afforded but little. From the foregoing experiments we see, that in order to obtain the purest juice, and in the greatest quantity, we must adopt a mode of cultivation, which will prevent the large and luxuriant growth of the stalk.

As we are only upon the threshold of this inquiry, many other improvements may be expected in the mode of operation: for example, it may be that cutting off the tassel as it appears on the plant, will prevent the formation of grain, and prove a preferable means for effecting that object.

On the whole, there appears ample encouragement for perseverance; every step in the investigation has increased the probabilities of success—no evidence having been discovered why it should not succeed as well, if not better, on a large scale, than it has done on a small one. In the first place, it has been satisfactorily proved, that sugar of excellent quality, suitable for common use without refining, may be made from the stalk of Maize. 2nd, That the juice of this plant when cultivated in a certain manner, contains saccharine matter remarkably free from foreign substances. 3rd, The quantity of this juice, (even supposing we had no other evidence about it) is sufficiently demonstrated by the great amount of nutritive grain which it produces in the natural course of vegetation.

It is needless to expatiate on the vast advantages which would result from the introduction of this manufacture into this country.

Grain is produced in the West, in such overflowing abundance, that the markets become glutted, and inducements are offered to employ the surplus produce in distillation. This business is now becoming disreputable. The happy conviction is spreading rapidly, that the use of alcohol as a beverage, instead of conducing to health and strength, is the surest means of destroying both. Some other production, therefore, will be required, in which the powers of our soil may be profitably employed. This, it is hoped, will be found in the business now proposed. Instead of distilleries, converting food into poison, we may have sugar houses, manufacturing at our doors an article in universal demand, not merely useful, but necessary; furnishing as it does one of the most simple, natural, nutritious varieties of human sustenance, found in the whole range of vegetable production. It is said that the general use of sugar in Europe, has had the effect to extinguish the scurvy, and many other diseases formerly epidemic.

The time of the crop in the sugar island, (says Edwards,) is a season of gladness and festivity to man and beast. The meagre and sickly among the negroes exhibit a surprising alteration in a few weeks after the mill is set in action. But though the use of sugar is attended with all these agreeable effects, there is no agricultural production furnished at so great a sacrifice of human life. The reasons of this mortality may be found in the climate, and the peculiar situations in which cane is cultivated. How much then will be taken off the load of human suffering, if this article can be produced in more temperate and healthful regions! The wide prairies, and fertile alluvial valleys of the West offer an ample field, rich with all the elements of success.

A glance at the history of the sugar manufacture will render it evident that, whether our project is destined to succeed or not, something of the kind must, of necessity, ere long be introduced.

The cane was first planted in the Island of Barbadoes about the year 1642. On comparing the accounts given by Ligon, who lived at that time, with the average of others taken one hundred and fifty years afterwards, it appears that the cultivation of a given quantity of land in canes required, at the latter period, more than three times the number of slaves found necessary at the former. The amount of crop, at the same time, was much diminished. It is believed that this progressive increase in labor, and decrease in produce, has occurred in every situation where the cultivation of sugar is carried on under the same



system. This being the case, it requires no gift of prophecy to discover that the constantly increasing demand for this article cannot continue long to be supplied from the same sources.

An expectation is entertained by many, that a greater amount of exports will be furnished from the West Indies in consequence of emancipation; but they will probably be disappointed. The system of forcing human labor beyond the point of endurance, though unfortunately common in many parts of the world, has no where been carried to a greater extent than in these Islands. It was commenced by the Spaniards, shortly after their discovery, and continued with unrelenting severity, until the native population, which was originally large, had dwindled to nothing. It has been continued since upon the negro race, and the same result has only been prevented by successive importations from Africa. But as the slave trade is now generally condemned by civilized nations, a supply of laborers from that source cannot be expected. The effect of emancipation in the West Indies, will be, to render manual labor more moderate, and the exports less. For, although the produce of the Islands may be increased by a more judicious application of labor and capital, it may be expected that the domestic consumption will be extended, by the increased ability of the free laborers to purchase the staples for their own use.

The amount of exertion which can be sustained under a tropical sun, without injury to health, is very small.

On this subject Dickson remarks—"That in no part of the Creator's works is his beneficent economy more admirable, than in providing the inhabitants of hot regions with food, clothing, and shelter, at a comparatively trifling expence of labor. Had the same severe and incessant toil been necessary for subsistence in hot, as in temperate climates, the torrid zone could never have been inhabited."

It may be doubted whether a tropical country can ever furnish a great amount of exports, except through the means of compulsory labor. It appears then, highly probable, that if the inhabitants of temperate countries wish to continue the use of sugar, they must find some means to produce it for themselves. The Beet appears to succeed well in Europe, and the manufacture from it is extending rapidly; but there is no hazard in making the assertion that Indian corn is far better adapted to our purpose.

The following mode of cultivating the plant, and making the sugar, is the best that can now be offered.

The kind of soil best adapted to corn is so well understood, that no directions on this point are necessary, except that it should be rich, the richer the better; if not naturally fertile, manure must be applied either ploughed in or spread upon the surface, or used both ways, according to the ability of the owner. Nothing can form a better preparation for the crop, than a clover sod well turned under, and harrowed fine immediately before planting.

Select for seed the largest and best ears of any variety of corn not disposed to throw up suckers, or spread out in branches: that kind most productive in the neighborhood, will be generally the one best adapted to the purpose. The planting should be done with a drilling machine. One man with a pair of horses, and an instrument of this kind, will plant and cover, in the most perfect manner, from ten to twelve acres in a day. Therows (if practicable, let them run north and south) two and a half feet apart, and the seed dropped sufficiently thick in the row to insure a plant every two or three inches.

A large harrow made with teeth arranged so as not to injure the corn, may be used to advantage soon after it is up. The after culture is performed with a cultivator, and here will be perceived one of the great advantages of drilling; the plants all growing in lines, perfectly regular and straight with each other, the horse-hoe stirs the earth and cuts up the weeds close by every one, so that no hand-hoeing will be required in any part of the cultivation.

(To be Continued.)

#### FOREIGN MARKETS.

The Unicorn, steamer, has arrived at Boston, bringing Liverpool dates to 3d March.—The lower and middling qualities of Cotton had declined 1-3d per lb. and the fair and good qualities barely maintain the previous rates, and the market abundantly supplied.—Fair Upland is quoted 5 3-8; fair Mobile 5 1/2; and fair N. O. 5 5-8. The sales of the week ending 25th Feb. amounted to 23,190 bales, of which 6380 Upland at 4 3-8a6 1/2, 9680 Orl. at 4 1/2a7 1/2, 2400 Ala. and Mobile 4 1/2a6, and 150 Sea Island 9 1/2a14 1/2 per lb. Stock in port 477,000 against 356,000 bales same period last season; the stock of American is 295,000, being 38,000 more than it then was.

A letter says "a better business has been done in Tobacco the last month, and the sales sum up 1370 hhds. Kentucky stem'd has sold lower, and 7 1/2 to 7 1/4 now the highest price; good Kentucky leaf becomes scarce, and holders are asking an advance upon the late low advance—the stock in warehouse 28th ult. 8296 against 6712 hds. same time last year."

#### BALTIMORE MARKET.

**General Remark.**—The pressure on the money market seems to be somewhat relieved, and matters are comparatively easier. The issue of small notes by the Banks is supplying a wholesome currency for change and small dealings. Wholesale dealers show no disposition to enter into new engagements, and the business of the city, generally speaking, is restricted in an extraordinary degree.

**Exchange.**—The rate for Bills on England has materially declined and we now quote at 5 1/2 at 6 1/2 per cent. premium, with but little demand. We quote bills on Bremen at 76a76 1/2 per cent. discount, and on Amsterdam at 89a39 1/2 cent.

**Domestic Exchange.**—Checks and drafts on New York and Boston are now selling at 1/2 per cent. discount, and on Philadelphia at 1/4 per cent. premium. We quote on Richmond at 9a9 1/2 per cent. discount. The paper of the Virginia Banks has further depreciated, and we now quote the brokers' rate at 9 per cent. discount. The notes of the Wheeling Banks continue at a discount of 15 per cent. We quote Treasury notes at 2 1/2 per cent. discount and Specie at 1/2 per cent. premium. Rail Road Orders have improved a shade and are in demand now at 45 per cent. discount.

**Hogs.**—The supply of Live Hogs has been good during the week, and we quote at \$4.50 per 100 lbs., and dull.

**Cotton.**—The market is very dull and transactions quite limited. The only sales we hear of are 40 bales Louisiana at 9 cents, 30 bales Upland at 8 1/2 cents and 25 bales Virginia 8 1/2 cents.

**Sugars.**—The import of Sugar this week is unusually large, 8 vessels having arrived from Porto Rico with 1681 hhds. 38 tierces and 54 bbls. and 3 vessels from New Orleans with 261 hhds. making an aggregate import of nearly 2000 hhds. The auction sales are as follows:—On Tuesday 175 hhds. New Orleans at \$4.15a\$4.85 To-day the cargo of the Gallant Mary, from Porto Rico, was offered, an 1 1/2 hhds. sold at \$4.65a\$5.05, and 38 tierces at \$5.40a\$5.65; of the cargo of the Stranger, from Porto Rico, 50 hhds. were sold at \$4.85a\$5.30.

**Timothy seed.**—There is a good supply in market and we quote the price at \$2.50 and dull.

**Molasses.**—At auction to-day 50 hhds. Porto Rico, just arrived, were sold at 19a20c. Sales of New Orleans in bbls. at 18a20c.

**Naval Stores.**—A sale of Tar this week at \$1.37 1/2 per bbls. cash, and of bright Varnish at 22p.

**Plaster.**—The last sales were at \$4.

**Tobacco.**—There was a moderate demand throughout the week until yesterday, and sales of the various qualities of Maryland were made to a fair extent at former prices except of the inferior and common sorts which in some cases were sold under last week's rates. Prices, however, were generally fully supported, viz. inferior and common Maryland at \$3a\$4; middling to good \$4.40a\$6.50; good \$7a8; and fine \$8a12. Since the receipt of letters by the last steamship from England purchasers generally have withdrawn from the market, the prices of Tobacco in Europe being very discouraging, and exchange on Europe difficult to be negotiated even at reduced rates. The receipts of Maryland Tobacco have been larger than usual at this season, and they have most found ready sale, so that the stock now in the hands of sellers, is not large, and is mostly of the old crop, and much of it inferior quality. The limited inquiry now making for Tobacco is mostly for the better qualities which would sell if in market. A few small lots of Ohio have been taken within the range of quotations, viz. common to middling \$3.50a\$4.50; good \$5a6; fine red and wrappery \$6.50a10; fine yellow \$7.50a10, and extra wrappery \$11a13. The inspections of the week comprise 828 hhds. Maryland; 66 hhds. Ohio, 86 hhds. Kentucky, and 1 hhd. Pennsylvania—total 981 hhds.

**Cattle.**—The offerings of Beef Cattle at the drove yards to day were smaller than for some time past, and the stock was all of inferior quality. Of 120 head that were in market 50 were driven north, and the balance sold at prices ranging from \$4 to \$5 per 100 lbs. as in quality. Sales of Live Hogs were made on Saturday at \$4 per 100 lbs. and to-day, a parcel or two in market are offered at \$3.50.

**Flour.**—The demand for Howard street Flour is quite limited and the transactions small at \$5.50 for good standard brands, at which price holders are very firm. No receipts by wagons to-day. The last settling wagon price was \$5.37 1/2.

There was some inquiry to-day for City Mills Flour. Some holders are willing to sell at \$5.62 1/2, while others refuse that price. The stock is light.

**Grain.**—A sale of prime Md. red, the first lot of any consequence at market, was made to-day for shipment at \$1.22. Sales of Md. white corn at 55 cts. and of yellow at 57a58 cts. Md. Oats would probably bring 42a43 cts. A lot of Virginia sold to day at 41 cts. Cloverseed has further declined, and we quote prime Pennsylvania at \$4a\$4.25 per bushel.

**New York, Saturday, P. M.**—Our Flour market has assumed a firmer aspect—200 bbls. Georgetown sold yesterday at \$6, 500 Genesee \$6.44a\$6.50, latter is now the asking rate;

950 bbls. Richmond county \$4.75; 500 bbls. Ohio \$6.06 1/2. Cotton is unsteady and it is difficult to give quotations. Upland and Florida range from 5a9 1/2 cts. Mobile 6a9 1/2, and New Orleans 5 1/2a9 1/2 cts. per lb. 700 bales were taken for export yesterday at these rates. Exchange on Baltimore 1-8 dis. Philadelphia par, Virginia 8 1/2, North Carolina 5 1/2a6, Savannah 2 1/2a5-8, Mobile 25a26, New Orleans 6 1/2, Nashville 20a-22, Cincinnati 7 1/2a8.

**Philadelphia, April 2.**—In the commencement of the week about 5000 bushels prime Penn'a. Wheat sold for milling, at 120c. per bushel, which we quote as the present market price. The receipts of Corn are small, and prime Southern yellow is worth 57c. white do. 52a53c. per bushel. Southern Oats 41a42c. per bushel. Clover is in little demand at \$4.25-4.50. Beef Cattle, 300 head at market—sales were at \$6 to 6.50—all sold.

**At New Orleans, in the three days ending on the 26th ult.** business of every kind had been extremely dull—only 3000 bales of Cotton changed hands, at the following quotations:—Liverpool classification.—Inferior 5a6, Ordinary 6 1/2a6 1/2, Middling 7 1/2a7 1/2, Middling fair 8 1/2a9, Fair to fully fair 9 1/2a10, Good fair 11, Good and fine 12a13 N. Ala. and Tenn. 4a9, Groves 7 1/2. Sugar inferior to ordinary, 3 1/2 to 5c. Molasses dull at 14 1/2a16c. Flour sold at \$5a\$5.12 1/2. A tolerable business had been done in Tobacco, and a slight decline in prices established. Mess Pork \$8a8 1/2, Hams 4a5c, sides 3 1/2a4c, Lard 3 1/2a4c. mess Beef \$10a11 and extremely dull. The amount of Flour and Meal inspected in the town of Alexandria, for the quarter ending 31st of March, 1842, was—17,079 bbls. and 204 half bbls. flour and 92 bbls. meal.

**At Alexandria, on Saturday,** the Flour market continued very unsettled with very light receipts—the few loads coming by wagons sell at all prices from \$5.37 to \$5.50—no sales from stores. Nothing doing in grain. The amount of Flour inspected in the city of Richmond, during the quarter ending 31st March, 1842, was—53,624 bbls. superfine, 517 half bbls. middlings, 928 bbls. condemned.

#### FRESH GARDEN SEEDS.

ROBERT SINCLAIR, Jr. & CO. No. 60 Light st. have just received, (via New York,) by the ships Glad- iator and Quebec, and from their SEED GARDENS, near this city, a superb assortment of GARDEN AND EUROPEAN FIELD SEEDS, among which are Knight's extra early dwarf; Vanac Pontrelect early York, and Sinclair's early flat Dutch or Landreth's improved Cabbage Seed; all new and superior sorts. Seventy-five bushels Sinclair's extra early Peas.

Knight's and Groom's marrowfat, egg and several other new varieties of Peas. 600 lbs. scarlet short top and turnip Radish Seed. Half long and turnip Beet; color very dark and finely shaped. Early cup Parsnip; Broccoli; Cauliflower. Lettuce, Large red and yellow Globe Mangel Wurzel; the latter a new variety.

Dwarf and pole Beans; Lettuce, Cucumber, Squash; Giant and common Celery; Egg Plant, Early Corn, Melons, Onion, Savoy Spinach, Tomato, Turnip, ash leaved Kidney, early frame and London round Potatoes; Lucerne, Vetches, &c. &c.

In store—American Field Seed of all sorts; Garden and Farming Tools, books on agriculture and management of stock, Plough and Machine Castings, Ploughs and Agricultural Machinery. A large and general assortment.

TREES AND PLANTS: raised at the Clairmont Nurseries.

#### MARTINEAU'S IRON HORSE-POWER

The above cut represents this horse-power, for which the subscriber is proprietor of the patent-right for Maryland, Delaware, and the Eastern Shore of Virginia; and he would most respectfully urge upon those wishing to obtain a horse power, to examine this before purchasing elsewhere; for beauty, compactness and durability it has never been surpassed.

Thrashing Machines, Wheat Fans, Cultivators, Harrows and the common hand Corn Sheller constantly on hand, and for sale at the lowest prices.

Agricultural Implements of any peculiar model made to order at the shortest notice.

Castings for all kind of ploughs; constantly on hand by the pound or ton. A liberal discount will be made to country merchants who purchase to sell again.

Mr. Hussey manufactures his reaping machines at this establishment. R. B. CHENOWETH, corner of Front & Ploughman sts. near Baltimore st. Bridge, or No 20, Pratt street. Baltimore, mar 31, 1841

#### BERKSHIRE PIGS—DEVON CATTLE.

The subscriber will receive orders for his Spring litters of pure Berkshire Pigs, bred from stock selected of C. N. Bement and John Loring Esqrs., Albany N. Y., Messrs Hurlbut of Connecticut, and importations from England.

He has for sale an Irish Grazier Boar, the produce of the celebrated Black Sow sent out by Wm. Murdoch Esq. of Ireland as his best sample of that breed.

He also offers for sale Cows with Calves, or in calf, yearlings and calves of both sexes, all full blooded, Devons, bred with great care, handsome animals and in good order. Address Post paid, JOHN P. E. STANLEY.

Or apply at No. 50 S. Calvert St. Baltimore.

#### GARDEN SEED.

J. S. EASTMAN (Pratt street) has received his SEEDS. My whose stock of Seeds now on hand from Mr. Landreth are of last year's growth, and can be depended upon as superior Seeds and true to their kind.—Also, in store, Orchards, Grass, and Hard's Seed of good quality and at low prices. Feb. 2



**PROUTY & MEARS' \$100 PREMIUM PLOUGH.**

Received at the office of the American Farmer, two sizes of the above celebrated plough, to which was awarded the prize of \$100 at the Massachusetts Fair. Farmers and others are invited to call and examine them. Orders received for them, as also for the Wiley and other ploughs, by m 30 SAM'L SANDS.

**BADEN CORN.**

The subscriber has received from Mr. Baden a lot of this celebrated CORN—and those wishing to make a trial of it can obtain it lots of a peck, bushel or larger quantity. Apply to mh 16 S. SANDS.

Who has for sale two beautiful DEVON HEIFERS, nearly two years old, deliverable in this city for \$50 each. Also a very handsome Devon BULL, one year this spring, price \$50, and a HEIFER of same age and blood, price \$40. mh 15

**PUBLIC SALE.**

Will be exposed at Public Sale in the city of Baltimore, at the public house of Mr. Habbervott, High street O. T. on FRIDAY, the 8th of April, 1842, the following property, viz:—Three Spanish Jacks, one Maltese Jack, one Jennett with foal, allowed to be the largest imported into the United States. Also, at the same time and place, two or three BROOD MARES, one with a foal by her side. All of which will be positively sold, when conditions will be made known by mh 23d JOHN McCAULEY.

**BERKSHIRE PIGS.**

The subscriber will continue to receive orders for their spring litters of young Berkshire Pigs, from their valuable stock of breeders, (for particulars of which, see their advertisement in No. 34 or 37, Vol. 2 of this paper.) Price at their piggery \$20 per pair; cooped and delivered in, or shipped at the port of Baltimore, \$21 per pair. All orders post paid will meet with prompt attention—address, T. T. & E. GORSUCH. mh 23

Hereford, Baltimore Co. Md.

**SEED-STORE & AGRICULTURAL WAREHOUSE.**

The subscriber has for sale at the old stand, No. 176 MARKET STREET, PHILADELPHIA, the most extensive assortment of GARDEN, GRASS and FLOWER SEEDS, to be found in the U. States. The assortment comprises all the standard varieties; also many new and choice kinds, crop of 1841, and warranted of the best quality. ALSO, PROUTY & MEARS' Centre Draught self sharpening PLOUGHS, the best and cheapest Ploughs to keep in repair now in use; Also, PROUTY & MEARS' patent SUB-SOIL PLOUGH. This implement does the work to admiration, leaving the sub-soil in the best possible manner. Also, Straw Cutters, Corn Shellers, Fan Mills, Vegetable Steamers, Cultivators, hill-side Ploughs, left hand Ploughs, and GARDEN TOOLS of all kinds—Agricultural BOOKS, &c. &c. for sale at wholesale and retail at the lowest prices, by D. O. PROUTY, No. 176 Market street, between 5th & 6th streets, Philadelphia. mh 15 2m

**AGRICULTURAL IMPLEMENTS.****FARMERS REPOSITORY IN PRATT STREET.**

The subscriber has in store his usual extensive assortment of AGRICULTURAL IMPLEMENTS; his stock of Ploughs and Plough Castings on hand, is probably the most extensive of any in Baltimore, and will be sold at very reduced prices for cash. Also, my Horse-powers, Threshing Machines, Straw Cutters, and every implement in my store are offered to the public on the same reduced terms.—Wholesale dealers will find it to their advantage to give me a call. JONATHAN S. EASTMAN

**LIME—LIME.**

The subscriber is prepared to furnish any quantity of Oyster Shell or Stone Lime of a very superior quality at short notice at their Kilns at Spring Garden, near the foot of Eutaw street. Baltimore, and upon as good terms as can be had at any other establishment in the State.

He invites the attention of farmers and those interested in the use of the article, and would be pleased to communicate any information either verbally or by letter. The Kilns being situated immediately upon the water-vessels can be loaded very expeditiously. N.B. Wood received in payment at market price. ap. 22 3m E. J. COOPER.

**THE LIME KILNS.**

The subscriber, in order to meet the increasing demand for Lime for agricultural purposes, has established Kilns for burning the same on the Rock Point farm, belonging to the Messrs. Lancaster, in Charles county, Md. where he is ready to supply all demands for this section of the state, and the waters of the Potomac, on accommodating terms. Orders directed to him at Milton Hill Post Office, Md. will meet prompt attention. do 7 6m WM. M. DOWNING.

**500 BARRELS OF POUDETTE.**

For sale at the office of the NEW-YORK POUDETTE company, 120 Nassau street, New York—Price two dollars per barrel, containing FOUR bushels heaped measure each; delivered on board of any vessel in this city.

Present prices of shares in this company, one hundred and ten dollars each entitling the holder to one hundred bushels of poudettes annually, during the continuance of the charter, 17 years from next March; which at present prices will be equivalent to a return of the capital and over five per cent annual interest every three years. Those who took shares in the winter of 1837—8 have received three hundred bushels on each share; and are entitled to seventeen hundred more. Those who desire shares will do well to apply soon, as they will not be sold at that price after 1st. May next—address the agent, D. E. MINOR, 120 Nassau St. up stairs. New York, January 26th 1842.—Feb. 2 7t

**TO FARMERS.**

The subscriber has for sale at his Plaster and Bone Mill on Hughes street, south side of the Basin, GROUND PLASTER, GROUND BONES, OYSTER SHELL & STONE LIME, and LEACHED ASHES, all of the best quality for agricultural purposes, and at prices to suit the times.

Vessels loading at his wharf with any of the above articles, will not be subject to charges for dockage or wharfage fe 23 WM. TREGO, Baltimore.

**AGRICULTURAL MACHINERY.**

Manufactured and for sale by A. G. & N. U MOTT South east corner of Enzor and Forest sts. near the Bel-air market, Old Town, Baltimore.

Being the only agents for this state, are still manufacturing WILEY'S PATENT DOUBLE POINTED COMPOSITION CAPT PLOUGH, which was so highly approved of at the recent Fair at Ellicott's Mills, and to which was awarded the palm of excellence at the Gouanstown meeting over the \$100 Premium Plough, Prouty's of Philadelphia, and Davis' of Baltimore, and which took the premium for several years at the Chester Co. Pa. fair—This plough is so constructed as to turn either end of the point when one wears dull—it is made of composition metal, warranted to stand stony or rocky land as well as steel wrought shares—in the wear of the mould board there is a piece of casting screwed on; by renewing this piece of metal, at the small expense of 25 or 50 cts. the mould board or plough will last as long as a half dozen of the ordinary ploughs. They are the most economical plough in use—We are told by numbers of the most eminent farmers in the state that they save the expense of \$10 a year in each plough. Every farmer who has an eye to his own interest will do well by calling and examining for himself. We always keep on hand a supply of Ploughs and composition Castings—Price of a 1-horse Plough \$5; for 2 or more horses, \$10.

We also make to order other Ploughs of various kinds. MOTT'S IMPROVED LARGE WHEAT FAN, which was so highly approved of at the recent Fair at Ellicott's Mills and at Gouanstown, as good an article as there is in this country—prices from 22 to 25.

**A STRAW, HAY AND STALK CUTTER.**

With 20 knives attached, will cut 3 tons of straw per day by horse power, and one half by manual power. Price \$35.

A CORN SHELLER that will shell as fast as two men will throw in, and leave scarcely a grain on the cob nor break a cob, by manual power; price \$17.

CULTIVATORS with patent teeth, one of the best articles for the purpose in use, for cotton, corn and tobacco price \$4, extra set of teeth 1.

HARROWS of 3 kinds, from 7 to \$12.

GRAIN CRADLES of the best kind, \$3.75.

HARVEST TOOLS, &c.

Thankful for past favors we shall endeavor to merit a continuance of the same. ja 26 if

**MOTT'S AGRICULTURAL FURNACE.**

The subscriber respectfully informs his customers, and the public generally, that he has on hand, and intends constantly to keep, a supply of MOTT'S JUSTLY CELEBRATED AGRICULTURAL FURNACES, for cooking vegetables and grain for stock of all kinds. They vary in size from HALF a barrel to FOUR barrels, and are better adapted to the purpose for which they are intended than any other yet invented; obtained the premium of the American Institute, and have given satisfaction to every gentleman by whom they have been purchased. Col. C. N. BEMMNT, the distinguished agriculturist near Albany, New York, who has had one in use for some time, in a letter to the editor of the Cultivator, says.

"The one I purchased last fall, I continued to use during the winter, and have found no reason to alter the opinion then expressed; but on the contrary, I am more confirmed, and do not hesitate, without qualification, to recommend it, with the late improvements, as superior to any thing, for the purpose intended, which I have ever used, or which has fallen under my observation."

"Mr. Mott has lately sent me one of the capacity of two barrels, containing the improvements, which consist in casting 'points of attachment' or gudgeons, on the rim or sides of the kettle, 'so that with a crane or level' it may be raised out of the casing and the contents emptied out, and to facilitate which, a loop or eye is cast on the bottom of the kettle so that it can be done without burning the fingers. The flange also, has been extended beyond the edge of the casing, so that if water boil over it will not run down the flues and put out the fire."

These furnaces and boilers are portable and may be set up in any out-house, being from their compactness and construction perfectly safe. The furnaces are made of cast iron and peculiarly calculated to economise fuel.

The following are the prices for one of the capacity of a half barrel

do	do	do	One barrel	\$12.50
do	do	do	One and a half	20.00
do	do	do	Two barrels	28.00
do	do	do	Three do	38.00
do	do	do	Four do	48.00

A. WILLIAMS, Corner of Light & Pratt St. Balt. Md. de 15 if

**REAPING MACHINES, CORN AND COB CRUSHERS, CORN SHELLERS, &c. WARRANTED.**

The Reaping Machine stands alone, increasing in reputation from year to year, saving its first cost in one large crop in the waste alone, while the attempts of others, to construct machines for a similar purpose, are well known to be total failures. Those who wish to procure Machines for the ensuing harvest, are requested to make early application to the subscriber, who has greatly improved them since last year. Corn and Cob Crushers, warranted superior to all others, also, Corn Shellers and Huskers constantly on hand at reduced prices. fe 23 OBED HUSSEY.

**"PATENT CONVOLUTED STEAM BOILER."**

The subscriber is prepared to receive and fill orders for Patent Steam Boilers at the shortest notice, and flatters himself that the certificates which he is enabled to present from the persons who have already tested the value and saving of this invention, will induce farmers and others to make early application for so useful and economical an invention.

Place of manufacture, McCausland's old Brewery, Holliday st. between Pleasant and Saratoga st. C. W. BENTLEY.

To D. L. PICKARD, Esq.—Dear Sir—Having made a careful experiment with your boiler in comparison with one of a different construction, both used for the same purpose, I have no hesitation in saying that it surpasses every boiler I have either seen or heard of for its economy in time and fuel. And I take pleasure in recommending it to all persons who are daily using twenty-five gallons of water or upwards—they will save at least two thirds in fuel and one half time. ISAAC DENSON, Superintendent, of Balto. City and County Alms House.

August 28th 1841.

The undersigned, the assignee of the newly invented "Patent Convolute Steam-Boiler," solicits the attention of the public generally, but more particularly of the farmers throughout the Southern countries, to the advantages of this invention. By means of a small boiler, measuring about 24 feet in length and 14 feet in breadth, three or four hundred gallons of water may be kept at the boiling point for two hours with scarcely four cubic feet of wood. The room saved is about four-fifths—the size of the patent boiler being hardly one-fifth the bulk of ordinary steam boilers—the expense saved has been calculated to be about five-sixths of the usual cost of fuel. Already has this invention been introduced into some of our public institutions, where its advantages have been fully tested and found to exceed the most sanguine expectations, as will be seen by the testimonials annexed. To farmers and producers this boiler is inestimable in furnishing a cheap and expeditious mode of steaming provender for cattle.

BALTIMORE, July 19, 1841.

Mr. D. L. PICKARD: I take pleasure in stating that your Boiler has given great satisfaction. By way of experiment, I boiled two hundred gallons of cold water in forty minutes—using only two small sticks of pine wood of 30 lbs. weight. Compared with the use of kettles of ordinary construction, this is a saving of three fourths in fuel and four sixths in time.

J. PASQUAY, Leather Dresser.

The undersigned has for some months been using one of D. L. Pickard's convoluted Boilers in his Morocco Factory, and for the saving of time and fuel it excels every thing of the kind he has seen in operation. From a general calculation he is satisfied, that it saves more than two thirds of the fuel. He has boiled two hundred gallons of water in forty minutes with two small sticks of pine wood, and with four sticks of wood, kept four hogheads of water boiling during six hours.

A. V. COZINE, Morocco Dresser,

Pearl street, near Lexington.

BALTIMORE, August 21, 1841.

MARYLAND PENITENTIARY.—Having purchased, for the use of this Institution one of D. L. Pickard's patent convoluted Steam Generators, and having used the same during the space of four months in cooking for several hundred prisoners, I find it admirably suited to this purpose. The Boiler now in use is 20 inches in diameter and 22 inches in length, taking the place of five iron kettles, yet steams meats and vegetables and does all other boiling incident to the process of cooking in a better manner than by any other plan of which I have any knowledge, and at a much less cost of fuel. In the use of the iron kettles set in brick in the ordinary way, the consumption of wood was more than one half cord per day, but with the present arrangement, the consumption is only one twelfth of a cord in the same time, and cooking done more perfectly.

WILLIAM HOULTON, Warden.

I fully concur in the statement above.

LINDSEY STURGEON, Ass't

THE MEADOWS, Balt. Co. Jan. 14, 1841.

"As to the steamer it is all that I could desire, as to the saving of time, fuel, and room, it is not to be excelled; one hand besides attending to my 'piggery' containing upwards of 32 store pigs and two 'breeders' steams daily all the roots which said pigs consume, and from fifty to one hundred bushels of cut corn stalks, for my cattle daily; my vat for steaming fodder, i. e. cut corn stalks contains fifty bushels, (which by the by is inconveniently large) it will steam this quantity in about two hours, after ebullition takes place, a friend has seen it at work and is very much pleased with it.

Respectfully, ROBERT DORSEY, of Edward.

ja 19 if

**FRESH GARDEN SEED.**

THOMAS DENNY Seedsman, has received his fresh supply of GARDEN SEED, the growth of 1841, and invites his friends and the Public to give him a call.

He has also Field Seed of various kinds, and best suited for this climate and soil, selected with care.

Orders for APPLE, PEACH and other Fruit and Ornamental trees will be thankfully received, and duly executed with promptness and dispatch for cash, having made arrangements with an old established and well known Nurseryman, in whom he feels confident the public cannot be deceived as to the particular kinds ordered. Also, Shrubs, bulbs, Flower Plants, Dahlias, Evergreens &c. &c. in their greatest variety furnished to order at regular prices, on commission.

He has also the agency for selling MURRAY'S Corn and Cob Crushers at the regular manufacturing prices. This is a first-rate article, having been proved by many Eastern Shore Farmers and others to be a very efficient Machine, uniting strength and simplicity in its structure.—It operates by hand, or can be adapted to any other power to suit all classes of farmers.

THOS. DENNY,

Corner of Pratt & Grant st.

Fe 23 7t—A2aw4tif 37-Up-stairs over Tyson & Brother.